



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,847	06/13/2005	Jun Sakamoto	IPE-052	1538
20374	7590	09/19/2007	EXAMINER	
KUBOVCIK & KUBOVCIK			MESH, GENNADY	
SUITE 710			ART UNIT	PAPER NUMBER
900 17TH STREET NW			1711	
WASHINGTON, DC 20006				
			MAIL DATE	DELIVERY MODE
			09/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/529,847	SAKAMOTO ET AL.
	Examiner Gennadiy Mesh	Art Unit 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 September 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-52 is/are pending in the application.  
 4a) Of the above claim(s) 20-52 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

Applicant's amendment filed on September 4,2007 is acknowledged.

Rejection is maintained as it was set forth in previous Office action mailed on June 4,2007.

***Claim Rejections - 35 USC § 102***

1. Claims 1- 5, 8 – 11, 13-15 and 16 –18 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al.( US 6,365,659).

Regarding Claims 1- 5 and 17-18 Aoyama discloses polyester composition and films, including laminate ( see lines 10 – 26,column 11) , comprising preferably from 3ppm to 50 ppm of titanium oxide ( see lines 45-49,column 4 and), wherein particle may have equivalent circular diameter more than 1 micron( see line 36,column 3) and phosphorous in the preferable amount from 3 ppm to 100 ppm. Titanium particles is used as a polymerization catalyst and can be present as complex oxide with silicon – (see lines 30 – 40,column 4).

Regarding Claims 5 and 8: Titanium compound can comprise alkoxy group – (see lines 1-5,column 5).

Regarding Claims 9-11 see lines 62-68,column 6 and 10 – 23,column 7.

Regarding Claim 13 see lines 3-9,column 7.

Regarding Claims 14 and 15 Aoyama discloses that composition can comprise alkaline earth metal, including magnesium, in preferable range of 10 ppm to 100 ppm see lines 19 – 30,column 6 and Table 1,Example 3.

Regarding Claim 16: as substantially same, composition disclosed by Aoyama - comprising same type and quantity of conductive particle will inherently has same volume receptivity.

***Claim Rejections - 35 USC § 103***

2. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al.( US 6,365,659) as it applied to claims 1- 5, 8 – 11, 13-15 and 16 –18 above, and in view of Naylor et al.( WO 97/47675).

As it was discussed above Aoyama discloses that titanium oxide catalyst could have different structures( see lines 1-5, column 5) including alkoxy groups, but silent about specific groups as, for example, residue from hydroxycarboxylic acids as it claimed by Applicant in claims 6 and 7.

However, use of titanium catalysts prepared by reaction of the titanium as alkyl titanate with lactic or citric acids taught by Naylor et al ( WO 97/47675) – see pages 11 and 12. Naylor teach that this type of titanium catalyst is preferable for production of film or bottle grades polyester resins, because it allowed produce resin with low haze value and good color, due to elimination of precipitation inorganic titanium compounds as titanium dioxide ( see page 3,third paragraph).

Therefore, it would have been obvious to ordinary skill in the art at the time of the invention to use specific titanium catalyst per teaching of Naylor in order to obtain composition disclosed by Aoyama with better (low) haze and color ( white) hue.

Art Unit: 1711

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al.( US 6,365,659) as it applied to claims 1- 5, 8 – 11, 13-15 and 16 –18 above, and in view of Kato et al.( US 6,680,353).

As it was discussed above Aoyama disclosed use of phosphorus based compounds, but silent about specific compound as ethyl diethylphosphonoacetate.

However, Kato teach that this specific compound is preferable in view of “the excellent effects of coloring prevention and melt stability” – see lines 23-45, column 8.

Therefore, it would have been obvious to ordinary skill in the art at the time of the invention to use ethyl diethylphosphonoacetate in polyester resin composition in order to obtain polymer with good color and melt stability.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al.( US 6,365,659) as it applied to claims 1- 5, 8 – 11, 13-15 and 16 –18 above, and in view of Uchida et al.( US 6,670,030).

As it was discussed above Aoyama discloses use of the polyester composition for laminate films, but silent about magnetic recording laminated film.

However, polyester films routinely used for base layer of magnetic recording films. For example, Uchida discloses that biaxially oriented laminate polyester film can be used for recording medium due to excellent running durability( see abstract).

Art Unit: 1711

Therefore, it would have been obvious to ordinary skill in the art at the time of the invention to use polyester composition disclosed Aoyama for recording medium laminated film as it taught by Uchida.

### ***Response to Arguments***

Applicant's arguments filed September 4,2007 have been fully considered but they are not persuasive.

All Applicant's arguments based on statement that Aoyama fail to disclose **quantity** of titanium containing particle with equivalent diameter 1 micron or more, is less than 100/0.02 mg. Note, that in order to meet limitation of Claim 1, reference does **not need disclose particle with “ equivalent diameter 1 micron or more, in a quantity less than 100/0.02 mg”** because quantity equal less than 100/0.02 mg included **zero (no) particles**. Therefore, all Applicants arguments are not persuasive.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 1711

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gennadiy Mesh  
Examiner  
Art Unit 1711



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700

\*\*\*